

CLAIMS

1. A steering apparatus for a vehicle, comprising:
a steering shaft supported in a cylindrical housing so that the steering shaft can freely move in an axial direction; and
a nut member screwed onto a screw groove formed in an outer circumference of the steering shaft through a rolling member and rotatably supported in the housing,
wherein steering is performed by transmitting rotation of a motor, which is driven according to steering, to the nut member and converting rotation of the nut member into movement of the steering shaft,
the housing is constructed by coaxially connecting a first housing having an integrally formed fixing section for fastening to a vehicle body with a second housing having a fixing section for fastening to the vehicle body in a separate member, and
the nut member is supported by a thrust bearing fitted and fixed in the first housing so that the nut member cannot move in both directions along an axial direction.

2. The steering apparatus for a vehicle as set forth in claim 1, wherein
a transmission section for transmitting power from the motor to the nut member is a gear transmission section comprising a large gear provided on an outer circumferential surface of the nut

member and a small gear which is meshed with the large gear and rotates with power transmission from the motor, and

the small gear is fixed to a projecting portion of a transmission shaft supported in a transmission housing loosely fitted into a part of the first housing or the second housing and having a mounting seat for the motor on one side, the projecting portion projecting from the other side of the transmission housing.

3. The steering apparatus for a vehicle as set forth in claim 2, further comprising a mesh adjusting section for adjusting a mesh state of the small gear and large gear by changing a position of the transmission housing in a radial direction within a range of loose fitting clearance between the transmission housing and the first housing or the second housing.